

EMERGENCY COMMUNICATIONS WITH THE NON-ENGLISH SPEAKING

(STRATEGIC MANAGEMENT OF CHANGE)

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ABSTRACT

The Vineland, New Jersey Fire Department serves a diverse and growing city, whose July 1, 1998 population was estimated at 55,484 residents. As the population of the city has increased, the number of incidents where there was a communication problem, due to a language barrier between emergency responders and the customer(s) requiring assistance, has gradually increased. While there had never been a documented incident where a language barrier problem had a significant negative impact on the outcome of an emergency incident; the department wished to be proactive and attempt to explore the options that may be available to better facilitate communication on the emergency scene with those customers who do not speak or understand English. The department also wanted to attempt to be more accessible and customer friendly to the non-English speaking customers that we encounter during routine non-emergency operations.

The problem, which resulted in this research being conducted, was that twenty to twenty five percent of Vineland Fire Department customers speak a language other than English as their primary language, and, the department was not prepared to communicate with those persons who do not speak English.

The purpose of this research was three fold. The first objective was to determine how other fire departments deal with incidents involving non-English speaking customers. The second objective was to determine if it was feasible to develop some type of quick reference manual, containing key phrases, i.e.: "Where is the fire?", for use by field personnel. The final objective was to develop procedures or a prototype quick reference manual, containing key phrases in commonly encountered foreign languages, to allow members of the department to more effectively communicate with non-English speaking customers. The evaluative research method was utilized to attempt to answer the following questions:

1. How many fire departments have a formal policy or procedure in place to deal with incidents involving non-English speaking customers?
2. How many fire departments provide formal training to their members on communicating with their non-English speaking customers?
3. How many fire departments have some type of quick reference manual containing key phrases in commonly encountered foreign languages?
4. In fire departments that do not have a formal policy for dealing with incidents involving non-English speaking customers, how do they handle these situations?
5. How many fire departments actively recruit and/or compensate bilingual personnel?
6. What are the requirements for recruitment and/or compensation as a bilingual firefighter?
7. Are there any other sources of foreign language assistance available to emergency responders?

An extensive review of pertinent literature was conducted to determine what may have already be written or developed which would address this subject. A survey instrument was developed to determine how other fire departments communicate with their non-English speaking customers. A total of 243 surveys were distributed to the five largest cities in every state, provided that they had a population of at least 10,000 residents, according to the United States Census Bureau.

A total of 97 surveys were returned, all of which were utilized for this research. The survey indicated that only 16 departments that responded (16.5%) had a formal policy on dealing with incidents involving the non-English speaking. Even fewer departments, 10 (10.3%) provide formal training to their members. Fourteen departments (14.7%) indicated that they have

bilingual personnel on duty at all times and 12 departments (13.5%) utilize a quick reference manual for field operations. Additional information was gathered on how departments determine who is considered bilingual, how they assign bilingual personnel, how they deal with language barrier problems without a formal policy or procedure, and, the effectiveness of quick reference manuals.

Recommendations for the Vineland Fire Department included immediately subscribing to A T & T's Language Line, implementing foreign language training programs within the department, and developing a network of on call translators. Development of a formal policy to address emergency communications with the non-English speaking was also recommended. Finally, additional evaluation was recommended to examine the benefits of utilizing quick reference manuals and whether it is feasible to develop one in-house or if it would be more beneficial to adapt an already available one, for use in the city.

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INTRODUCTION

The Vineland Fire Department serves a diverse and growing city, whose July 1, 1998 population was estimated at 55,484 residents (United States Census Bureau, July 10, 2000). As the population of the city has increased, so have the number of incidents where there was a language barrier communication problem between emergency responders and the customer(s) requiring assistance. While there had never been a documented incident where a language barrier had a significant negative impact on the outcome of an emergency incident, the potential for such an occurrence is always present.

We, as human beings, are keenly aware of the importance that effective communication plays in nearly every aspect of our lives. The ability to communicate, in both directions, with our superiors, subordinates, significant others, etc., can directly impact how effective and successful we are, and, whether we are able to achieve our maximum potential. The importance of effective communication may never be more important than on an emergency scene, with lives hanging in the balance. However, that is exactly where, in our increasingly ethnically diverse society, we may experience serious problems. Even customers, who summon us for assistance, who speak English as a second language, may instinctively revert to, or be more comfortable communicating in, their native tongue when confronted with the stresses of a fire or other emergency.

There are a multitude of circumstances where firefighters arriving on the scene of an emergency, may want to quickly gather some information that will assist them in planning a strategy for handling the incident, or, actually assist them with mitigation of the situation. Being able to quickly determine the possible location of the fire, if everyone is out of the structure and/or accounted for, and, where trapped or unaccounted for occupants were last seen, are vital

pieces of information that can save precious minutes and impact the outcome of the situation in a very positive way. Conversely, an inability to communicate, effectively, with the customer(s) who have summoned us to assist them, places the responders at a definite disadvantage and in extreme circumstances could result in tragic consequences.

Firefighters attempting to extricate a non-English speaking patient from a motor vehicle accident may likewise be hampered by an inability to effectively communicate with their victim. A conscious patient can provide rescuers with valuable information on trapped extremities, such as the ability to move them, or, whether operations, which are moving components of the vehicle, may be relieving or increasing pressure or pain. Conscious patients may also be very frightened and a communication barrier will preclude being able to effectively calm them or explain the extrication operation to them as you proceed.

The problem, which resulted in this research being conducted, was that an estimated twenty to twenty five percent of Vineland Fire Department customers speak a language other than English as their primary language. The leadership of the department recognized that the department was not prepared to communicate with these twenty to twenty five percent of their customers who do not speak English. They wanted to be proactive and explore the options that may be available to them to better facilitate communication, on the emergency scene, with those customers who do not speak or understand English. The results of this research will be utilized to determine what, if any, changes should be made to departmental operations, policies, procedures and/or training to facilitate improved emergency scene communications with non-English speaking customers. Publishing the results of this research will add to the limited amount of information available to fire departments who may be evaluating their own options, as they struggle to communicate with an increasingly diverse, foreign speaking population.

While the focus of this research is directed specifically at emergency scene operations, the department's senior staff was also cognoscente of the fact that a secondary benefit of attempting to improve our ability to communicate with our non-English speaking customers would result. That is, the department would be more accessible and customer friendly to those residents of, and visitors to, our city, who speak a language other than English, that we encounter during routine non-emergency operations.

The purpose of this research was three fold. The first objective was to determine how other fire departments deal with incidents involving non-English speaking customers. The second objective was to determine if it was feasible to develop some type of quick reference manual, containing key phrases, i.e.: "Where is the fire?", for use by field personnel. The final objective was to develop procedures or a prototype quick reference manual, containing key phrases in commonly encountered foreign languages, to allow members of the department to more effectively communicate with non-English speaking customers. The results of this research will be utilized to make recommendations to the Vineland Fire Department with regard to possible changes in department operations, policies procedures and/or training that will facilitate more effective emergency scene communication with non-English speaking customers. The evaluative research method was utilized to attempt to answer the following questions:

1. How many fire departments have a formal policy or procedure in place to deal with incidents involving non-English speaking customers?
2. How many fire departments provide formal training to their members on communicating with their non-English speaking customers?
3. How many fire departments have some type of quick reference manual containing key phrases in commonly encountered foreign languages?

4. In fire departments that do not have a formal policy for dealing with incidents involving non-English speaking customers, how do they handle these situations?
5. How many fire departments actively recruit and/or compensate bilingual personnel?
6. What are the requirements for recruitment and/or compensation as a bilingual firefighter?
7. Are there any other sources of foreign language assistance available to emergency responders?

BACKGROUND AND SIGNIFICANCE

The City of Vineland occupies more than 69 square miles, in the southern part of the state, making it the largest city, in area, in New Jersey. As of July 1, 1998, the city had an estimated resident population of 55,484, ranking it as the twelfth most populous city in New Jersey (United States Census Bureau, July 10, 2000). Vineland was incorporated as a city on July 1, 1952, culminating the consolidation of the Borough of Vineland and surrounding Landis Township (A.M. Barsotti, personal communication, May 1998). The city is the largest component of the Vineland, Millville, and Bridgeton Metropolitan Area.

It is estimated, unofficially, that nearly 20% of the city's population utilizes Spanish as their primary language. An additional 5% to 10 % of the population is estimated to primarily speak another foreign language other than Spanish. Most prevalent among these are Italian, Indian and various Asian languages and dialects. Over the past several years, an increase has been noted in residents who have recently immigrated from the republics of the former Soviet Union.

Statistics from the United States Census Bureau (July 19, 2000) group much of the demographic data for Vineland and Millville together. According to their breakdown of social characteristics from the 1990 census, the total population of these two cities totals 94,174. Of these residents, 17,801 or 18.9% report that they speak a language other than English and 7,514 of those or 7.9% of the total population reported that they do not speak English very well. Spanish was the most prevalent of the languages spoken with 12,458 persons or 13.2% reporting they speak that language and 5,844 or 6.2% reporting that they do not speak English very well.

While the author was unable to locate any verifiable data that would substantiate this position, my personal knowledge of the demographics of these two cities would lead me to the opinion that at least 75% of the foreign language residents documented in these statistics, reside in Vineland. Using this opinion as a basis would mean that 13,350 or 24% of residents of Vineland speak a language other than English. Of these 9,343 or 16.8% speak Spanish.

The physical demographics of the city cover a broad spectrum. The downtown/central core area is typical of those found in most other northeastern cities. It consists of a deteriorating commercial and shopping district and closely spaced two and three story wood frame dwellings, many of which have been converted from single family to multi family use. There are several high rise apartment buildings and a number of garden apartment complexes, most of which provide subsidized housing. In addition, an inventory of vacant factories and warehouses provide silent testimony to the city's previous role as a leading clothing manufacturing center (Finley 1999).

Surrounding this central core in all directions is a rather large area whose development trends are typically suburban. This area of the city has tree lined residential streets in long established neighborhoods as well as a significant number of newer tract developments. Several

large shopping centers, including a covered mall, numerous smaller strip malls, garden apartment complexes and a growing number of professional office complexes are located in this area. There are also a number of extremely successful industrial parks that cater to a growing number of light and medium duty manufacturing operations. The outermost areas of the city still support a significant number of working farms and undeveloped woodland (Finley, 1999).

The Vineland Hook and Ladder Fire Company, formed on July 23, 1872, is the original ancestor of the Vineland Fire Department. The department made the transition from a fully volunteer to a combination department in 1931 when the first career firefighters were appointed (“History of the Vineland Fire Department”, 1976).

The department in its present form was established on May 26, 1953 when the City Council passed Ordinance #76, “*An Ordinance to Establish, Regulate and Control the Fire Department of the City of Vineland, to Regulate and Define the Officers and Members Thereof, Their Duties and Compensation*” (City of Vineland Ordinance #76, 1953, A.M. Barsotti, personal communication, June 1998). This ordinance consolidated the three independent fire companies from the Borough of Vineland with the four from Landis Township into a municipally operated fire department (Finley, 1999).

Today the department operates from six stations, one staffed by career personnel and the remaining six staffed by volunteer personnel. A 1997 survey of the department by the Insurance Services Office, resulted in recommendations for three additional stations (C. F. Shaner, letter, September 8, 1997). In 1999, the department answered 1,973 calls for assistance.

Of twenty- seven career firefighters, two are of Hispanic origin and speak Spanish fluently. Several other members of this division speak either Spanish or Italian with varying degrees of fluency. The volunteer division of the department, which consists of approximately

130 members, has 9 members who are of Hispanic origin and speak Spanish with varying degrees of fluency. Reliable figures were unavailable, at the time of this paper, concerning the number who may have an ability to communicate in another language.

The primary purpose of this research is to provide information that the Vineland Fire Department will utilize to analyze and assess its capabilities for communicating with its non-English speaking customers. However, this research will be utilized to concurrently satisfy the applied research project requirement of the Strategic Management of Change course, a component of the Executive Fire Officer Program at the National Fire Academy. The research relates to Module 2, The Change Management Model, by providing the author with a method to systematically analyze the current ability of his department to communicate with customers who do not speak English. The model will also allow systematic analysis of the procedures and policies being utilized in other fire departments. It will also allow recommendations to be made regarding policy, procedure and/or training changes that may be appropriate or required in order to improve the level and/or quality of service offered by the department. If the research and subsequent analysis indicate that changes are required in order to improve service delivery, The Change Management Model will provide a blueprint for guiding the leadership of the department through the planning, implementation and evaluation stages of the process.

LITERATURE REVIEW

The literature review was somewhat surprising in that it did not yield, as the author had assumed, a great deal of information. In fact, much of the previously written information was centered on communicating with the hearing impaired, a communication problem that the author had not even considered initially, while undertaking this research project, although it certainly poses significant challenges to emergency responders. Not surprisingly, many of the issues, problems and solutions are the same, whether the customer is hearing-impaired or speaks another foreign language. For this reason, the issue of communicating with the hearing impaired, will be examined as part of the overall scope of this research project.

Coleman (1990) wrote on a survey conducted in December 1989 in *On Scene*, the newsletter of the International Association of Fire Chiefs. The survey dealt primarily with incidents involving the hearing impaired. However, nearly 50% of responding departments did not have a written procedure for incidents that involved a language barrier. He also identified a resource that will assist emergency responders deal more effectively with these incidents. This innovative tool is a pocket guide of selected fire and emergency signs developed as a cooperative effort of the Fairview, New York Fire Department, Westchester Community Services for the Hearing Impaired, and, the New York School for the Deaf.

Coleman influenced this research by providing data that indicates that since most fire departments do not have a procedure for dealing with these incidents, they are probably not adequately prepared to handle them. This is unfair to those that they are charged with protecting. Coleman was also influential in that he provided insight into a resource that is available and may allow procedures to be implemented without totally reinventing the wheel.

In 1992, King provided a perspective that communicating with hearing impaired individuals on an emergency scene might be difficult, even if the person would otherwise be expected to understand English. He states, “...to many deaf people English is a second language – their first language being American Sign Language, a language that differs dramatically from English” (King, 1992, p. 58). He goes on to provide tips for emergency responders that will assist them in communicating more effectively with the customer, and, ultimately dealing more successfully with these situations. He also provided a quick reference table, illustrating some variations of commonly used emergency phrases, in American Sign Language.

King’s work influenced this research by providing tips for communicating more effectively across the language barrier. Some of his basics of communication could be utilized for incidents involving language barrier problems with other than the hearing impaired. His sign language illustrations will also be beneficial to a department attempting to develop a procedure or program to handle these situations.

Williams (1983) described a program, which had been implemented by the Phoenix Fire Department that taught firefighters sign language. The rationale behind this program was that approximately ten percent of the population has a severe or total hearing loss, according to the Phoenix Fireworks, a newsletter of the Phoenix Fire Department. The goal of the program was to break down this communication barrier and be better able to serve both the emergency and non-emergency needs of the citizens they serve.

In 1987, Talpers reported on a program being utilized in Prince William County, Virginia to teach firefighters and paramedics sign language so they will be able to communicate with the hearing impaired whom they encounter in the performance of their duties. The classes, taught by

Leisa Corbin, a deaf eighteen-year old county resident, were received in a very positive manner. Talpers reported that most attendees felt that the information that they gained will assist them with performing their duties more proficiently.

Williams and Talpers both contributed to the research by providing information on programs that are already in existence to assist departments better communicate with their hearing impaired customers, and, which have been successful. These programs provide a valuable resource for those departments looking to adopt a program or implement a new procedure to better serve their hearing impaired customers.

The insight provided by Clark (1988) was somewhat different than some of the previous authors. Clark offers the opinion that communicating with the hearing impaired can often be simplified, stating, “Effective communication with the deaf may not require extensive formal knowledge of sign language. In fact much can be accomplished without any formal use of signs or sign training. Many signs can be guessed by using pantomime” (Clark, 1988, p. 41).

Clark goes on to advocate, that although it is slower, communicating by finger spelling, using the manual alphabet, is a much simpler and more reliable means of communication. He states, “it’s fairly easy to learn and remember and it isn’t as confusing as signs” (Clark, 1988, p. 41). He also provides illustrations of the proper hand signs for the entire alphabet.

In the same article Clark discusses a hearing impaired handbook utilized by the Sarasota, Florida Fire Department. The thirty-two page book contains many questions commonly asked by fire or EMS personnel as they attempt to mitigate various emergency situations. The unique aspect of the handbook is that it is bilingual in its approach. The latest edition has all questions and answers, if appropriate, in both English and Spanish.

Clark was influential, in that he provided a different perspective on preparing for these types of emergencies, advocating that common sense and a keep it simple approach will allow you to successfully communicate in many cases. He also provided information on another valuable resource possibly available to fire departments.

Todd (1986) provides an important link between communicating with the hearing impaired customer and other customers who do not speak English. Like King, in 1992, Todd states that the hearing impaired patient is basically a non-English speaking patient and many of the same principals for attempting to communicate effectively will apply. Notable among the suggestions that he makes are:

- Attempt to find a common language. Many people speak more than one language and if you also speak one, both of your second languages may provide a common denominator.
- Use English even with the non-English speaking. Words in the English language, especially medical and anatomical terms, sound similar to words in other languages, and, in conjunction with appropriate gestures, a basic dialogue can be established.
- Utilize “sign language”, that is utilize pointing and gesturing to communicate an idea.
- Always use common sense. Talk to the customer slowly and clearly and in a normal tone and volume. Never shout or over exaggerate or announce words.

(Todd, 1986, p.41)

Todd was influential on this research for several reasons. First, his implication that both

hearing impaired and other non-English speaking customers can be dealt with in essentially the same manner, will simplify development of procedures that will allow emergency responders to communicate more effectively in these situations. Second, his common sense approach to handling these situations can provide a stop gap measure for emergency responders who may encounter a language barrier situation prior to development of a procedure or implementation of training in their department. Finally, no matter how much training a department provides, how detailed their procedures are, or, how comprehensive their quick reference manual is, a situation will eventually be encountered that has not been anticipated. Once again, as in many situations, utilizing the common sense tips he describes may allow basic communication to be established and the situation to be successfully mitigated.

Kitty and Wayne Garnett (1984) examine some of the difficulties that emergency responders, especially firefighters, encounter when attempting to communicate with the nearly one in ten residents of the United States who speak a language other than English. While simple signs and improvising may establish basic communication, "... details, like "second-to-the-rear bedroom on the left side of the hall," may be almost impossible to convey" (Garnetts, 1984, p. 30), without a more thorough understanding of the language being encountered. The inability to effectively communicate in a medical emergency may also severely limit the ability of EMS personnel to render proper care. The serious and potentially fatal implications of this problem are very clear. The Garnetts go on to identify some solutions to the language barrier problem being utilized in various fire departments such as the use of community interpreters, recruitment of and priority assignment of bilingual firefighters to targeted areas, providing second language training to firefighters, and, the use of bilingual phrase or translation manuals.

The Garnetts influenced this research by advocating that the more thorough the understanding emergency responders have of the language they are attempting to communicate in, the more likely they will be to be able to understand the intricate details necessary to quickly and effectively mitigate a situation. They also provided a number of ideas that can be incorporated into a comprehensive procedure to deal with these types of incidents.

Ziolkowski (1984) touches on one of the arguments likely to be heard in firehouses, especially those in departments steeped in tradition, when the idea of learning to communicate with our customers, on their level, is first presented. “This is America...and if they’re going to live here, they better learn to speak English, dammit”(Ziolkowski, 1984, p.5). She then very effectively refutes the notion by arguing that, “...the emergency scene is hardly the time or place for a philosophical debate or grammar lesson” (Ziolkowski, 1984, p. 5). She stresses that the issue of overriding importance is handling the emergency in a proper manner and nothing is worth the cost of not doing so.

Ziolkowski also examines several options available to fire departments to help bridge the language gap between the emergency responders and the customers they serve. She advocates training firefighters who serve neighborhoods with high ethnic populations, on a voluntary basis, in the basics of the language(s) they may encounter. Ziolkowski argues that the advantages of this approach include “direct communication between responder and customer, no lost time waiting for an interpreter, and, sending the message that the fire department is a caring and compassionate organization, responsive to the needs of those it serves (Ziolkowski, 1984, p.5).

Ziolkowski was influential on this research by discussing some of the resistance that may be encountered in attempting to implement a program in a fire department. The need to deal with the detractors of such a program, and their arguments, are a significant part of Phase I of the

Change Management Model. Among the issues considered at this stage of the process include identifying existing organizational conditions, cultures and potential destabilizing forces that may affect the ability to implement change. Ziolkowski was also influential by virtue of the position that she takes on training field personnel in foreign languages rather than relying on volunteer interpreters.

Dees (1994) presents several interesting statistics. He states that census information indicates that over thirty million Latinos live in the United States making us the world's fifth largest Spanish speaking country. He goes on to predict that by the middle of the twenty first century, fifty percent of all Americans will speak Spanish. As a result, Dees states that it is important for emergency responders to cross the language barrier with emergency Spanish. However, this Spanish must be targeted to the specific needs of the emergency responder.

Instead of learning the detailed nuances of language, fire students concentrate on specific oral skills, permitting them to take quick control of an emergency situation. Emergency responders concentrate on three major areas to safeguard the public safety and health of Hispanic citizens:

- Asking Questions
- Giving Answers
- Giving orders (Dees, 1994, p. 110)

Dees also stresses the need for using polite speech when addressing a foreign speaking customer. In Spanish, using terms such as Señor or Señora show respect and can increase cooperation. He also touches on some prototype computerized training programs that some

public safety agencies are beginning to use to train their personnel. While at the time of his article, only Spanish was available, Chinese and Japanese programs were being developed.

Dees provided influence on this research by offering yet another opinion on what the focus of foreign language training in a fire department should entail. While it may be considered common sense, the issue of being polite when communicating with the non-English speaking can certainly impact the effectiveness of your communications and ultimately the outcome of the incident. As with many of the other authors, Dees also provided information on potential resources for use by fire departments developing procedures or training programs.

Over the years a number of fire departments have recognized the need to better communicate with their non-English speaking customers and have taken measures to address this need much like those who have attempted to deal with incidents involving the hearing impaired. As early as 1977, Gustavo and Raul Matamoros, in conjunction with the Worcester Polytechnic Institute, wrote about a program to teach Spanish to members of the Worcester, Massachusetts Fire Department. This program involved the development of vocabulary lists, language tapes, emergency reference cards and classroom instruction in Spanish. Although the program initially involved about fifty personnel, by the time it concluded, participation had dwindled to about fifteen firefighters. Feedback on the program, from those who completed it, was very positive, with most personnel reporting that they possessed sufficient knowledge of the language to communicate with Hispanic residents during an emergency. It was also strongly suggested that the program be expanded beyond the one station where the experiment was conducted.

Covey (1984) wrote on efforts by the Garden Grove, California Fire Department to better communicate with its 14% Hispanic population. This effort was spearheaded by the firefighters of Station One, A Shift. This program, which was also evaluated, as being very successful,

utilized some different techniques to enhance the learning environment. Classes were taught using a variety of learning games, incentives, role playing exercises and simulations. An unannounced 100 question final exam was also given on the last night of the twelve-week class, with the lowest test score being a ninety-five (Covey, 1984, p. 35). Monthly review sessions were also implemented for not only review purposes, but, for vocabulary and skill building, and, an opportunity to discuss and critique incidents.

The writings of Covey and the Matamoros were influential on this research, in that they provided a look at programs to voluntarily teach firefighters foreign languages in an effort to help them communicate more effectively with those that they serve, and, ultimately be better prepared to perform their jobs. In both cases the programs have been successful and appear to be well received within the department.

Several authors (Diaz-Gilbert, 1995; Quintanilla, 1984) wrote on other essential components of a program to deal more effectively with incidents that require firefighters to cross the language barrier. Both stressed that in many instances crossing the language barrier requires the emergency responder to cross cultural barriers as well. Just knowing what word to say, or understanding the words that the person speaks, may not be enough to facilitate effective communication. Diaz-Gilbert provides, among other examples, the following synopsis of the diverse cultural interpretations of using direct eye contact:

Eye contact, for example, sends different messages in different cultures.

In Anglo-American culture, direct eye contact is a sign of respect and attentiveness and is to be maintained when communicating. In Hispanic and Asian cultures, the reverse is true. Making direct eye contact is a sign of disrespect and a challenge to authority. In Middle Eastern culture, eye

contact sends yet another meaning – implying an invitation of a sexual kind (Diaz-Gilbert, 1995, p. 44).

It is easy to understand how an emergency responder unfamiliar with a foreign culture, could aggravate an already tense and difficult situation, by inadvertently disrespecting or offending someone with an improper word, statement, gesture or action. For this reason, Quintanilla, reported that Houston's program to teach firefighters Spanish, involves extensive training on Hispanic culture and its significant differences from Anglo-American culture. The same concern would be true for many other cultures, such as those originating in Asia or the Middle East.

Diaz-Gilbert and Quintanilla influenced this research by providing the perspective, that in order for emergency responders to effectively communicate with those who speak foreign languages, they must learn more than just words. Both stressed that in order for a foreign language program to be effective, a major component of the program must be learning about the culture itself.

LaRusso (1993) discussed steps that had been taken in Aurora, Colorado to deal with their significant population of Asian origin. This program which involved both the police and fire departments, also began with training in understanding the differences in traditions and cultures between the mostly Anglo-American emergency responders and their new Asian neighbors. The next step in the program involved development of a network of translators who would be available twenty-four hours a day to assist emergency responders. While the translator program now involves more than sixty individuals who speak more than twenty-six languages, including sign language, and, are trained in basic police and fire procedures, the problem of immediate access and communication remained. The solution involved development of a book of

basic questions, answerable with a nod or pointing, in five different languages commonly spoken in the community (LaRusso, 1993, p. 81). The combination of solutions utilized by the city has provided an effective program to bridge the language barrier in this community.

Schoenfeldt (1987) provided insight into important keys in the development of an effective emergency services translator program. He begins by offering the opinion that translation assistance must absolutely be available for every language spoken in the community. He goes on to offer suggestions for a successful program that include such issues as volunteer availability most hours of the day, providing basic police and fire procedure training and encouraging use of the translators to maintain interest in the program. He stresses the point that translators should strictly serve as translators and interpreters. They should not attempt to interject their own solutions or remedies to the problem without specific approval of the emergency responders. Schoenfeldt also discusses systems that are being utilized in some cities, which allow dispatchers receiving a call, which involves a language barrier, to immediately establish a three-way call with an appropriate translator. He also stresses that if translators are utilized in field operations, maintaining their safety is paramount.

LaRusso and Schoenfeldt influenced this research by presenting information on the use of translators as part of a comprehensive emergency services communication program. While both LaRusso and Schoenfeldt provided significant information on the establishment of a translator program, and, while this author believes that translators will form an important component of a comprehensive program, they do, as Ziolkowski argues, have significant limitations when it comes to immediate emergency scene communications.

In 1998, Simmons presented information on an international language EMS card system, developed by members of Phoenix Fire Department, Engine 16, B. Shift. The system involves

cards with common EMS related icons and questions marks and is designed to elicit answers after firefighters point to a question mark and the appropriate icon, i.e.: question mark then picture of a pill = Are you taking any pills? (Simmons, 1998, p. 48). According to members of the department the system isn't perfect and hasn't eliminated language barrier problems. However, it has been effective in assisting firefighters in dealing with a number of situations.

Simmons influenced this research by providing yet another potential resource to assist departments that are attempting to develop a foreign language communication program.

Hoffman (1990) reported on an international translation service available to assist emergency responders bridge the language gap. The service was initiated in 1982 by two residents of San Jose, CA, one a police officer and one a former Marine, to provide police translation services mainly in Vietnamese. The service, volunteer at first, quickly expanded to other emergency services and other languages. In 1984, a company was formed called Communications and Language Line, known as C.A.L.L. which provided translations in forty one languages at a cost of \$1.94 per minute (Hoffman, 1990, p. 25). In 1989, the company was purchased by AT & T and is now known as AT & T Language Line. Subscribing to the service, which will provide emergency translations in a matter of minutes, costs \$1,000 for the initial subscription and \$1.94, per minute. This per minute rate is the same as it was in 1984 when the service was inaugurated. While many calls are still received from dispatch centers requesting assistance, many emergency service organizations now use the service for on scene translation assistance.

Johnson (1993) also wrote on the benefits of subscribing to the AT & T Language Line. She states that the United States has nearly twelve million non-English speaking residents and another twenty to thirty million foreign visitors arrive annually (Johnson, 1993, p. 58). She

reports that Language Line now provides access, within minutes, to interpreters who speak more than 140 languages (Johnson, 1993, p. 58).

Munks (1995), one of the original founders of C.A.L.L. and now the Director of Marketing and Sales for A T & T's Language Line, provides insight on a consortium of other agencies that are working with AT & T to make language translation services more accessible to, and effective for, emergency responders. Among the participants are the Defense Language Institute, Monterey Institute of International Studies and CTB-McGraw Hill. Munks also reports that most Language Line connections are well under one minute. Significant to this authors research is his statement, " New Jersey offers only slightly less of a challenge with 20 percent of the state's population speaking a language other than English at home (Munks, 1995, p. 27).

Hoffman, Johnson and Monks all influenced this research with the information that they provided on a resource that can significantly improve a department's ability to communicate with their non-English speaking customers immediately. By merely subscribing to the Language Line, departments can establish almost instantaneous, on scene communication in more than 140 different languages. This service can provide an immediate cornerstone to any procedure on communicating with the non-English speaking.

Recently, Philadelphia Mayor John Street's transition team issued a report containing recommendations that they felt would improve the ability of the city to provide services and thus positively impact the quality of life in the city. Significant in the recommendations made by the Public Safety Committee was that the fire department hire firefighters who are able to speak multiple languages, " in order to communicate with different ethnic groups throughout the city" ("Street Gets Reports on Blight, Arts, Safety", 2000).

The Public Safety Committee report was influential on this research, in that the need to communicate effectively with an increasingly diverse population is being recognized both inside and outside of the emergency services. This report is also significant, in that assigns a very high priority to a concept that would be considered revolutionary in a proud and traditional northeastern department, one with both a strong union and a powerful civil service system.

PROCEDURES

The research process started with a comprehensive literature review to determine what, if any, research had previously been conducted, and, what had already been written on the subject of communicating with fire department customers who do not speak English. The research involved reviewing fire service trade journals and magazines, newspapers and other pertinent sources of information. The literature review commenced at the Learning Research Center (LRC), at the National Fire Academy, in February 2000. Additional material was obtained from the LRC through an inter library loan and the United States Postal Service in May and June 2000. In addition, materials were obtained from the author's personal library and the Vineland Fire Department Library from May through August 2000.

Kelly Sorracco, a shift supervisor for Vineland EMS, was interviewed to determine what, if any, formal procedures are utilized by that agency to deal with their frequent interaction with the non-English speaking. Officer Matthew Finley, of the Vineland Police Department, and, the author's brother, who is also a certified 9-1-1 center dispatcher, provided information on procedures in place to deal with incidents originating from non-English speaking callers. Edward Bradford, Chief Dispatcher, Cumberland County 9-1-1 center provided information on their

procedures to deal with calls from non-English speaking customers. He also provided additional details on the use of A T & T's Language Line.

Captain Mario Garza, Public Information Officer for the Indianapolis, Indiana Fire Department provided information on an aggressive program in that department to deal with their exploding Hispanic population.

Background information on the establishment of the city and the fire department, had been obtained in May 1998, from Anna Marie Barsotti, Deputy City Clerk, City of Vineland, in conjunction with a previous educational endeavor.

A survey instrument titled "Communicating With Non-English Speaking Customers" was developed to gather information from other fire departments on how they are addressing this issue (see Appendix A). The information requested in the survey included, among other things, whether the department had a formal policy in place to deal with these incidents; if the department provided formal training to it's members on dealing with these situations; if the department utilized some type of quick reference manual in commonly encountered foreign languages; and, what the department's policy was on recruiting, assigning and compensating bi-lingual personnel. The survey also asked respondents who answered "no" to questions on formal procedures and/or training, how they dealt with incidents involving the non-English speaking.

The survey was mailed to the fire departments in the five largest cities in each state, according to the United States Census Bureau web site, provided that each city had a population of at least 10,000 residents. The minimum population of 10,000 people was chosen, as it was the minimum population that could be easily extracted from the Census Bureau database and it was felt that this criterion would provide a good cross section of responses. The web site of the United States Postal Service was consulted to obtain the appropriate zip codes. A total of 243

surveys were mailed out to fire departments in all 50 states. Of those, ninety-seven (39.9%) surveys were returned, representing 45 states, all of which were utilized for this research.

The results of the surveys were entered into a computerized database program (Microsoft Access), tabulated and analyzed. The results were utilized to answer research questions one through six.

After the results of the surveys were tabulated and analyzed, this information, along with information gathered during the literature review, pertinent interviews and the author's subjective evaluation of the Vineland Fire Department's ability to communicate on an emergency basis with the non-English speaking, were analyzed in the context of Phase I of the Change Management Model. This analysis included acknowledging the perception that the Vineland Fire Department has a limited ability to communicate with the non-English speaking. It also recognized the fact that this was not an important issue for many members of the department and that attempts to address the problem might be met with resistance.

The potential for external pressure to address this problem was analyzed in the context of political strength from the increasingly influential Hispanic community, as well as from the potential public relations embarrassment that could result from a language barrier issue that affected the outcome of an incident. Legal implications associated with not addressing this issue were also considered. The analysis led to the conclusion that the department must address this issue and change the way it has traditionally handled these types of situations. It also led to the conclusion that in order to develop and implement a successful program, the program will need to be multi faceted and the implementation of these changes will need to be done gradually over time in order to minimize opposition and maximize buy in by the members of the department.

The department is now moving into Phase II of the Change Management Model, the planning phase. The model will be utilized as a blueprint for the department's senior staff as they work through this phase, as well as, the subsequent implementation and evaluation phases.

LIMITATIONS

This research project was impacted by a number of limiting factors, not the least of which is the six-month time frame imposed for completion. One of the original purposes of this project was to be able to develop procedures or a prototype quick reference manual for use by field personnel to assist them with dealing more effectively with incidents involving non-English speaking customers. While the research located several procedures, as well as, several quick reference manuals that are currently in use, it takes time to evaluate whether these existing resources could be adapted for use in Vineland. In some cases, requests for more detailed information, have yet to be answered. It is also apparent to the author, that any successful program to effectively deal with the non-English speaking must be multi-faceted, which again increases the amount of time required to develop and implement a program. It is still the intention of the department and this author to develop a formal procedure and some type of quick reference manual for use by department personnel. However, completion of this project is probably six months to one year away.

The small number of surveys returned, 39.9% could have a statistical impact on the accuracy of the data collected in relation to the overall population being sampled. It should be noted that it was difficult to obtain precise, accurate addresses for a number of the departments in the target population. As a result, thirty-one surveys or 12.7% were returned as being

undeliverable. This reduced the number of surveys assumed to have been delivered to 212. Conversely, a response rate of ninety-seven surveys out of 212 translates into a response percentage of 45.7%, which is a slight improvement over the former figure.

The survey was mailed to fire departments serving the five largest cities in each state as defined by the Census Bureau. Utilizing this criterion did not allow consideration of county or regional fire departments that are frequently encountered in places such as California, Florida and the Washington, DC Metropolitan area. As a result, many of the largest fire departments in a given state may have been excluded from the population sampled, which could affect the statistical accuracy of the data evaluated.

The survey instrument also proved to have several flaws. First, question #7 asks respondents to answer, only if the answer to question #6 was yes. The assumption was that a department that did not have a formal policy probably would not provide formal training to its members. This was not the case, as several departments answered “no” to question #6 and “yes” to question #7. For the purposes of this research, non-responses to question #7 were recorded as the functional equivalent of a “no” answer.

Question #11 asked respondents who answered “no” to question #10 to provide an opinion on whether some type of a field reference manual would be an effective resource. The question should have directed those who answered “no” to question #9, not question #10, to answer this question. Those who answered question #9 with a “yes” would have answered question #10. Ultimately, this mistake did not effect the data as respondents answered this block of questions properly.

On question #15, an “r” was omitted from the word your. This error had no impact on the question. It should be noted that both of the above referenced errors have been corrected on the survey (Appendix A) included with this paper.

DEFINITIONS

Non-English speaking customer. A person whom the fire department encounters on an emergency scene who speaks a language other than English, as their primary language, and, who has limited, if any, ability to communicate in English. This may also include persons who have the ability to speak English, but, under the stress of an emergency revert to the comfort of their native tongue.

Hearing impaired customer. A person who possesses a hearing impairment severe enough to require them to communicate primarily through use of American Sign Language and/or the manual alphabet, also known as finger spelling. Based on information obtained through the literature review, these persons will be considered as non-English speaking for the purposes of discussion and program development.

American Sign Language. A sign language for the deaf in which meaning is conveyed by a system of articulated hand gestures and their placement relative to the upper body (Miriam Webster Collegiate Dictionary).

Manual Alphabet/Finger Spelling. Communication by spelling words with signs made with the fingers (Miriam Webster Collegiate Dictionary). Each sign formed by the fingers equates to one letter of the alphabet.

Quick Reference Manual. A manual carried on the department’s apparatus that contains key phrases such as, “Where is the fire?”, or, “Is everyone out?”, in foreign languages that are

applicable to the customers that the department would be expected to encounter on a regular basis. The manual should contain simple phrases and a selection of expected and/or appropriate responses.

RESULTS

1. How many fire departments have a formal policy or procedure in place to deal with incidents involving non-English speaking customers?

The “Communicating with Non-English Speaking Customers Survey” indicated that of 97 departments which responded, 16 (16.5%) had a formal policy in place to deal with incidents involving their non-English speaking customers. However, the survey did request a copy of the procedure or policy, if one was in place, and, not one department included the requested information with their response. The remaining 81 respondents (83.5%) reported that they did not have any type of formal policy in place, although several did provide an outline of informal procedures or programs that they utilize (see Table 1).

Table 1

Formal Policies on Incidents Involving the Non-English Speaking

Departments surveyed that have a formal policy in place to deal with emergency incidents involving non-English speaking customers	16
Departments surveyed that do not have a formal policy in place to deal with emergency incidents involving non-English speaking customers	81

The survey also asked fire departments if they had personnel on duty at all times who fluently speak the prevalent foreign languages that the department might encounter. A total of 95 departments answered this question and of those, only 14 (14.7%) indicated that they have bilingual personnel on duty at all times. The remaining 81 respondents (85.3%) reported that they did not have bilingual personnel on duty at all times. Two departments did not answer this question.

The departments were also queried on if they had bilingual personnel available, how these personnel were assigned. A total of 55 departments responded and of those, 50 (90.9%) reported that these personnel received normal duty assignments like any other firefighter. Only 5 departments (9.1%) reported that their bilingual personnel were given priority assignments to stations in areas with large concentrations of non-English speaking customers.

Table 2 provides a breakdown of figures regarding the availability and assignment of bilingual personnel.

Table 2
Departments That Utilize Bilingual Personnel

Departments that have bilingual personnel on duty at all times	14
Departments whose bilingual personnel are given priority assignment to stations in areas with high concentrations of non-English speaking customers	5
Departments whose bilingual personnel are given normal station assignments	50
Departments that do not have bilingual personnel on duty at all times	81

2. How many fire departments provide formal training to their members on communicating with their non-English speaking customers?

Of the 97 departments which responded to the survey, only 10 (10.3%), reported that they provide formal training on communicating with the non-English speaking, to their members. Once again, the survey requested more specific information on the training program, and, as with question #1, no respondent included the requested information. An additional 87 departments (89.7%) responded that they do not provide any type of training (see Table 3).

Table 3

Formal Training on Communicating with the Non-English Speaking

Departments surveyed that provide formal training to its members on communicating with non-English speaking customers	10
Departments surveyed that do not provide formal training to its members on communicating with non-English speaking customers	87

What is intriguing about the results from this question is that only 7 of 16 departments (43.7%) who responded that they had a formal policy in place to deal with these types of incidents (Table 1) also answered this question with a “yes”. The remaining 9 departments (56.3%), reported that although they had a formal policy in place, they provided no formal training to their members on dealing with these incidents. Conversely, 3 departments, which reported that they do not have a formal policy in place to deal with these incidents (Table 1), indicated on the survey that they provide formal training to their members.

3. How many fire departments have some type of quick reference manual containing key phrases in commonly encountered foreign languages?

Eighty-nine departments responded to this question as detailed in Table 4. The results showed that only 12 departments (13.5%) had some type of quick reference manual available for

field use. Of the 12, 3 departments (25%) rated their guide as very effective. Four departments (33.3%) evaluated their guide as somewhat effective. Two additional departments (16.7%) stated that their guide was not effective and the final 3 respondents (25%) were unsure of how effective their guide may be.

A total of 77 departments (86.5%) indicated that they do not use any type of quick reference manual. However, 58 of these departments (75.3%) felt that a quick reference manual would be an effective resource for field personnel. Nineteen departments (24.7%) stated that they did not feel that such a manual would be an effective resource.

Two additional departments, which had indicated that they already have a quick reference manual in use but stated that they were unsure of it's effectiveness, also answered that they felt a manual would provide an effective resource. One conclusion that can be drawn from this is that the department has recently placed a manual in use and has not had time to properly evaluate it.

Table 4

Use of quick reference manual(s)

Departments surveyed that utilize a quick reference manual, containing key phrases in commonly encountered foreign languages	12
Departments surveyed that rated the guide very effective	3
Departments surveyed that rated the guide somewhat effective	4
Departments surveyed that rated the guide not effective	2
Departments surveyed that did not know how the guide rated	3
Departments surveyed that do not utilize a quick reference manual, containing key phrases in commonly encountered foreign languages	77
Departments surveyed that feel a quick reference guide would be an effective resource in the field	60
Departments surveyed that feel a quick reference guide would not be an effective resource in the field	19

4. In fire departments that do not have a formal policy for dealing with incidents involving non-English speaking customers, how do they handle these situations?

Table 5 provides details on how departments without any formal policy on communicating with the non-English speaking handle incidents that involve a language barrier. For this question, departments could select multiple answers as may be applicable to their situation.

Table 5

How Departments Without Formal Policies On Communicating With Non-English Speaking Customers Deal With Language Barriers

Use of bilingual firefighter(s)/EMT(s)	41
Use of bilingual police officer(s)	35
Use of other bilingual city employee(s)	27
Use of available bilingual bystander(s)	38
Whatever means available	48

5. How many fire departments actively recruit and/or compensate bilingual personnel?

Of the 89 departments that answered this question, 19 (21.3%), responded that they actively recruit and/or compensate bilingual personnel. The other 70 departments that responded (78.7%) stated that they do not actively recruit and/or compensate bilingual personnel.

Table 6 provides additional details on the recruitment and compensation practices of these departments. It should be noted that departments could select as many of these options as was applicable to their particular situation, thus accounting for the differences in the figures reported.

Table 6
Bilingual Recruitment/Compensation Practices

Departments surveyed that actively recruit and/or compensate bilingual personnel	19
How these departments surveyed recruit/compensate:	
Recruit bilingual personnel	13
Give preferential hiring to bilingual personnel	5
Compensate bilingual personnel already on the job	6
Utilize bilingual personnel already on the job without any type of compensation	10
Departments surveyed that do not actively recruit and/or compensate bilingual personnel	70

6. What are the requirements for recruitment and/or compensation as a bilingual firefighter?

Table 7 provides details on how departments determine who is qualified for formal recruitment and/or compensation as a bilingual firefighter. For this question, departments could also select multiple answers as may be applicable to their situation.

Table 7
**How Departments Surveyed Determine Who Is "Qualified" To
 Be Considered Bilingual**

Oral interview/examination/assessment center conducted in the language	9
Written examination instrument utilized to determine ability to write the language	1
Reading comprehension examination to determine ability to read the language	3
Other evaluation/qualification instrument	2
No formal testing/evaluation process utilized	43

7. Are there any other sources of foreign language assistance available to emergency responders?

The most immediate and reliable source of assistance for fire departments would be to subscribe to A T & T's Language Line. According to Munks (1995), "A T & T has been providing the 9-1-1 community with immediate access to interpreters of more than 140 languages, 24 hours a day with an average connect time of well under one minute" (Munks, 1995, p. 27). Hoffman (1990) wrote about the benefits of the system not only for translating information from callers whose language is readily known, but, also determining what unknown language callers may be utilizing. He also advocated not limiting use of the system to the dispatch center, stating, "Many departments that have subscribed to the Language Line for several years are becoming less dependent on the service in communication centers but are using it more and more in the field" (Hoffman, 1990, p. 26).

Most fire departments should be able to locate other sources of assistance within their own community. High school and college language departments can provide a source for interpreters, as well as, a place to seek assistance with cultural and language training for department members. Various community groups and cultural organizations may also be contacted to see if they can provide the same services to the department. Other fire departments, which may have successful programs in place, should be contacted for assistance and/or to determine if their program can be adapted for use.

DISCUSSION

While the City of Vineland has made some tentative steps toward overcoming the language barriers that its emergency services encounter on a daily basis, to date, the efforts have been sporadic, not coordinated, and, not indicative of the development of a comprehensive plan. Fire, EMS and police agencies primarily rely on their bilingual employees or members to provide interpretation, if necessary. If bilingual personnel are not available, then these duties fall to either a bilingual member of another agency, if they are on scene, or to bystanders, usually children, if they are not. The Police Department has access to the Language Line (M. Finley, personal communication, August 2000) and EMS is aware of this resource and has utilized it on occasion (K. Sorracco, personal communication, August 2000). However, the Fire Department was not aware that this resource was available in the city to assist them with incidents involving the non-English speaking. The Cumberland County 9-1-1 Center, which provides dispatching services for the Fire Department, also subscribes to this service (E. Bradford, personal communication, August 2000), a fact unknown to most members of the department. Both the

Police Department and County 9-1-1 center also have T-D-D machines for receiving 9-1-1 calls from the hearing impaired. However, after dispatch, communication with these people is even less likely to be accomplished with the on scene members due to the relative scarcity of people fluent in American Sign Language or the manual alphabet.

Since 1998, the city, in cooperation with the Fireman's Mutual Benevolent Association, Local #49, the bargaining agent for the city's career firefighters, has implemented a \$225.00 per year stipend, in the labor agreement, to department personnel who are formally classified as bilingual. Unfortunately, only one firefighter has been so classified, since the New Jersey Department of Personnel exam that personnel are required to pass in order to be classified, requires fluency not only in speaking the language, but, also in reading comprehension and writing. The city's labor agreement with the police union contains a similar stipend.

The consequences of being unable to communicate with those that we encounter in response to a call for assistance can be tragic. Newgren (1995), citing the work of Johnson, 1979, wrote briefly about a fire that occurred, in 1979, in which several Vietnamese residents of an unnamed northern city, perished, because they could not understand instructions from the fire department. On August 29, 2000, a police officer in Detroit, Michigan shot and killed a deaf and mute man who was threatening him with a rake. The officer did not know that the man could not hear his repeated orders to drop the rake. A relative of the man, who had originally placed the 9-1-1 call, had also neglected to inform the police of the man's inability to hear ("Detroit Police Shoot Deaf Man Waving Rake", 2000).

Just as it has for hundreds of years, America's fire service must rise up to meet this new challenge and develop plans to insure that we can communicate effectively with all of the residents of, and visitors to our community, regardless of what language they speak. Ziolkowski

(1984) states, “Is not our proclaimed duty to ‘protect lives and property’ an empty string of words, devoid of meaning, if we can not even respond to another human’s cry for help?” (Ziolkowski, 1984, p. 5).

Many fire departments, Vineland among them, have recognized the need to provide fire prevention and public fire education presentations and materials in languages other than English. Murgallis (1990), Newgren (1995) and Williamson (1993) all addressed problems that had been encountered with getting the fire prevention message out to the growing populations of their communities, who speak a language other than English. All three examined the issue of presenting multi-lingual public fire education programs and its impact on the community and its fire problem. Yet the author’s research could not locate a single research paper dedicated to the issue of communicating with the non-English speaking on emergency scenes.

The Vineland Fire Department has provided fire prevention materials in Spanish for more than 10 years. Both of the Hispanic firefighters employed by the department are actively involved in the presentation of public education programs. However, fire prevention programs are scheduled when a bilingual firefighter is available, and, are conducted in a relatively controlled environment. Personnel operating in the dynamic and changing environment on the emergency scene do not enjoy these luxuries. They must be able to gain as much information as they possibly can, in a very short period of time, in order to make strategic and tactical decisions as they attempt to mitigate the situation. Effective communication is an essential component of this process.

A fifteen-question survey instrument was prepared to assist the author with determining what other fire departments are doing to handle incidents involving the non-English speaking. The survey was mailed to 243 fire departments, representing the five largest cities in each state

provided that they have a population of at least 10,000 residents, according to the United States Census Bureau. A total of 97 surveys (39.9%) were returned and all of these were utilized in the study. Of the departments who answered the survey, the percentage of their populations that spoke a language other than English as their primary language ranged from 0% to 85% with the average being 35%. These figures do not take into account those in the community who are hearing-impaired.

Of the 97 departments which responded to the survey, only 16 (16.5%) have a formal policy in place to deal with incidents involving the non-English speaking. The remaining 81 departments (83.5%) have no formal policy, although some did indicate that they had an informal policy such as subscribing to A T & T's Language Line.

Even fewer departments provide formal training to their members on communicating with their non-English speaking customers. Only 10 respondents (10.3%) answered that they provide formal training to their members. The remaining 89.7%, 87 departments provide no formal training. What is intriguing about these figures is that only 7 of 16 departments (43.7%) who responded that they had a formal policy in place to deal with these types of incidents also answered this question with a "yes". The remaining 9 departments (56.3%), reported that although they had a formal policy in place, they provided no formal training to their members on dealing with these incidents. Conversely, 3 departments, which reported that they do not have a formal policy in place to deal with these incidents, indicated on the survey that they provide formal training to their members.

Fourteen departments (14.4%) reported that they had bilingual personnel, who could speak key languages, on duty at all times. Eighty-one departments (83.5%) replied that they did not have bilingual personnel on duty at all times. Two respondents (2.1%) did not answer the

question. Fifty-five departments that responded, answered the questions on how they assign bilingual personnel, if they are available. Fifty of the departments (90.9%) assign these personnel normally as they would any other firefighter. Only 5 departments (9.1%) give priority assignment to their bilingual personnel to stations in areas with high concentrations of non-English speaking customers. The responses by departments regarding assignment of personnel may be dictated by department policies which specify how station assignments are made, i.e.: seniority, labor agreements, diversity of services provided by the department, training and certification levels of personnel, etc.

Another area where a relatively low percentage of respondents indicated they were taking a proactive stance was on recruitment and compensation practices for bilingual personnel. Of 89 departments, which answered this question, only 19 (21.3%), reported that they actively recruited or compensated bilingual personnel. The remaining 70 departments (78.7%) reported that they did not. Thirteen departments reported that they recruit bilingual personnel, five give preferential hiring to bilingual personnel, six compensate bilingual personnel already on the job and ten utilize bilingual personnel already on the job without any type of compensation. Departments had the option of selecting more than one choice in response to this question, if they were applicable to their situation. Once again, factors such as collective bargaining agreements, civil service regulations, etc. may have impacted the options available to departments that wish to address these issues.

The same constraints may have impacted the responses to a question on how these fire departments determine who is qualified to be considered bilingual. Once again departments could select any and all options that were applicable. Nine departments responded that they utilize an oral examination instrument, one utilized a written examination instrument, three

utilized a reading comprehension instrument and two used some other type of evaluation technique that was not further specified. The largest block, 43, answered that they did not employ any type of formal testing or evaluation.

The departments who answered the survey were also asked several questions on the use of a quick reference manual, available for use by field personnel, that would contain key phrases, in commonly encountered foreign languages. A total of 89 departments answered this question with 12 (13.5%) reporting that they use a quick reference manual of some type. Of those 12, three rated their manual very effective, four rated it somewhat effective, two rated it not effective and three were unsure of how effective the guide they used was. Seventy-seven departments (86.5%) reported that they do not use any type of quick reference manual. A total of 60 departments felt that a quick reference would be an effective resource while 19 did not. Two of the sixty departments that stated they felt a manual would be an effective tool had previously answered that they already used a quick reference manual but were unsure how to rate it. The inference that could be drawn here is that these two departments had recently placed a quick reference manual in service, but, had not had adequate time to properly evaluate it.

The survey also queried fire departments on how those without formal policies on communicating with the non-English speaking dealt with language barrier issues. Departments that answered could choose as many options as was appropriate. Forty one departments utilized bilingual firefighters or EMTs, thirty five used bilingual police officers, twenty seven sought assistance from other bilingual city employees, thirty eight relied on available bystanders, and, forty eight used whatever means were available to attempt to establish communication.

The results of the “Communicating With Non-English Speaking Customers Survey” would tend to lead to the conclusion that the majority of fire departments are not much better

prepared to communicate with the non-English speaking in emergency situations than the Vineland Fire Department. However, the relatively low number of surveys, which were returned, could possibly call the validity of the results into question. Further complicating the assessment of other fire departments abilities is the fact that copies of procedures, training programs and quick reference manuals were requested from those departments which answered “yes” to those specific questions on the survey, yet, not a single fire department included the requested information with their reply.

The author was able to obtain significant information on an aggressive program being implemented by the Indianapolis, Indiana Fire Department to assist them to better cope with incidents involving their burgeoning Hispanic population. According to Captain Mario Garza, the Public Information Officer, in 1997, the city had approximately 12,000 Hispanic residents. In the year 2000, this number will swell to 80,000 to 100,000. By the year 2004, the Hispanic population is estimated to reach 200,000, nearly 25% of the total population. The fire department has 750 firefighters, only 3 of whom are known to be bilingual, 2 of them fluently (M. Garza, personal communication, August 11, 2000).

According to Captain Garza, the department has begun to recruit firefighters who are bilingual in English and Spanish. They are also beginning to train firefighters in Spanish survival skills, that is learning to use the language that they will need on the street, as well as having them think in Spanish rather than think in English and translate into Spanish. The pilot offering of this 50-hour course was attended by 20 police officers and 20 firefighters, all assigned to A Shift. At the conclusion of the class, 23 of the participants traveled to Honduras for 10 days for the purpose of being immersed in the culture. The program will be expanded this fall to include the other fire department shifts. The long-range goal of the department is to have one bilingual

firefighter on every engine on every shift within 10 years (M. Garza, personal communication, August 11, 2000).

Captain Garza has also developed a quick reference manual for field use that is issued to those who successfully complete the program. He also stated that medical releases for EMS calls are done by radio or over the phone so that a recording is made in the event of future litigation (M. Garza, personal communication, August 11, 2000).

Attempting to develop a comprehensive yet feasible and manageable program to allow a fire department to better communicate with its non-English speaking customers can be a complex and daunting task. However, to play “ostrich” and pretend that the problem does not exist, especially if the department serves a constituency with a large non-English speaking population, can expose the department to negative political consequences, liability and unfavorable publicity. Think what the headlines in the Detroit papers must have screamed the morning after the police officer shot the deaf man. The question thus becomes not whether a department needs a program, but rather how detailed and extensive their program must be.

Subscribing to A T & T's Language Line is a quick solution to the language barrier problem. It is relatively inexpensive for the tremendous resource that it provides. It can be accessed quickly and can be used not only for translation services but also to identify unknown languages. Since it can be accessed from anywhere, provided the user has a valid access code, it is an appropriate resource for personnel operating in the field. The only potential drawback to it providing a one stop solution, especially for those departments with limited non-English speaking populations, is that it can not address communication with the hearing impaired. However, that fact notwithstanding, departments who serve small non-English speaking

populations would probably need nothing more than a subscription to deal with their occasional language barrier problem.

Departments who serve larger non-English speaking populations and/or who wish to include the hearing impaired within the parameters of their program will want to go further. They would probably be surprised at the resources available within their own community to assist them with program development. College and high school language departments should be consulted for assistance with the development of programs to teach firefighters the language(s) that they may encounter. Various community and advocacy groups may be willing to provide similar assistance to the department, with the added intangible benefit of the fire department generating increased goodwill in the community by appearing to be more caring and compassionate.

There appears to be, however, several keys to the development and implementation of a successful language-training program in a fire department. First, the program should be voluntary. Trying to force people to learn something that they do not want to, generally is a prescription for failure and a waste of time for everyone involved. It can also compromise the acceptance of the initiative and create labor problems. Second, as advocated by Diaz-Gilbert (1995), LaRusso (1993) and Quintanilla (1984), any language training program should include provisions early on to provide training on the potential cultural differences between firefighters and their non-English speaking customers. Successfully crossing the cultural barrier may be as critical to emergency responders as crossing the language barrier.

The language training should, as Dees (1994) recommends, not involve learning the detailed nuances of language, but, should allow emergency responders to “concentrate on specific oral skills, permitting them to take quick control of the situation” (Dees, 1994, p. 110).

In other words, the language training should be broken down to the simplest, essential elements needed for the responder to establish communication. The same holds true for communicating with the hearing impaired. It may be most effective for emergency responders to learn the manual alphabet or finger spelling which consists of just 26 signs, rather than attempt to learn the thousands of signs included in American Sign Language. Clark (1996) supports this concept stating, “it’s fairly easy to learn and remember and it isn’t as confusing as signs” (Clark, 1988, p. 41).

The issue of retention of the newly learned language skills is also critical to the success of the program. If the firefighters learn any second language, be it spoken or signed, and then rarely, if ever, use it, within a short period of time, they will remember very little, if any, of their new skills. It is important that provisions be made to allow the firefighters to have regular follow-up training and review sessions for the purpose of practicing and refining their skills. According to Covey (1984), this is an important component of the program implemented by the Garden Grove, California Fire Department.

There are two final factors to consider in the development of a language-training program. First, as much as possible use the street “lingo” rather than the “pure” form of the language. Since you will be on the street, these are the nuances that you need to know. While vacationing in Canada this summer, a tour bus driver was explaining that he had years of English language training while attending French speaking schools in Montreal. Yet, he stated that he did not know how to speak the language until he started driving tour buses after high school. Finally, be aware of various dialects in the same language. Vineland’s Hispanic population is comprised primarily of people of Puerto Rican and Mexican origin. While they both speak Spanish, their dialects and use of the language are vastly different.

Another effective tool can be the development of a network of translators to assist the emergency services with language barrier problems. LaRusso (1993) and Schoenfeldt (1987) both wrote extensively on some of the key issues involved in establishment of a translator program. The benefits of utilizing translators include their fluency in the language and thus their ability to engage a person in much more complex conversation. In most cases, one could probably make the assumption that the translator would be well versed in the cultural differences between responder and customer and would insure that as much as possible, actions taken would not insult or offend anyone. The major drawback of translators is that they are not immediately available. As a result, their benefit to emergency responders during the critical early minutes of an incident would be limited if not virtually non-existent.

Most of the departments who responded to the “Communicating With Non-English Speaking Customers Survey” felt that some type of a quick reference manual, containing key phrases utilized on the emergency scene, in commonly encountered foreign languages, would be an effective resource. A number of the writers cited in the Literature Review also presented some type of manual as a viable resource. Clark (1988), Coleman (1990), King (1992) and Simmons (1998) all discuss various quick reference manuals that could be utilized to assist with communicating with the hearing impaired. Kitty and Wayne Garnett (1984), Gustavo and Raul Matamoros (1977) and Clark, LaRusso and Simmons all weigh in on various quick reference manuals that are in use in various fire departments, or, provide foundation material for the development of one.

While the author agrees that a quick reference manual carried on the apparatus could be an effective resource, in order for their potential to be maximized, the user must have some familiarity with the language and considerable familiarity with the manual or the “quick” will be

lost. A situation could quickly become very frustrating and embarrassing as a firefighter attempts to establish communication by fumbling through a quick reference manual, one word or sign at a time. The Indianapolis program previously discussed issues participants a quick reference manual upon their completion of the language-training program.

There are several key components to developing an effective quick reference manual. First the questions asked by the emergency responder should be in the form of short phrases applicable to fire or EMS emergencies. If possible questions should be answerable with yes or no responses. If not, a selection of expected responses should be included. A phonetic pronunciation guide should be included alongside the questions and answers. Finally, as with any other tool that we use, personnel must periodically train with the guide to maintain an acceptable proficiency in its use.

In conclusion, the development of a program to allow a fire department to communicate effectively with its non-English speaking customers is a complex, time consuming endeavor. It requires a thorough evaluation of the department's needs, capabilities, resources and expected levels of service. It also requires a significant commitment at all levels of the department. The program must also be an ongoing one. If it is quickly developed and then put on a shelf and forgotten, it will be anything but successful.

RECOMMENDATIONS

The Vineland Fire Department should immediately make arrangements to access the Language Line through either the Police Department or Cumberland County accounts. If this is not possible, they should immediately establish their own account. In either case, all department members should be made aware of the availability of this resource and be provided with information on how to access it.

The department should develop a formal written policy on emergency communications with the non-English speaking that clearly spells out the program that the city has adopted and will pursue. The policy should clearly spell out the responsibilities of each member of the department when they are faced with a language barrier issue.

It should be noted that under normal circumstances, the policy or procedure should be developed first and then supporting issues such as training addressed. However, because of the time required to develop a comprehensive policy on such a complex issue, and, the urgency involved with improving the department's ability to communicate with its non-English speaking customers, the Language Line subscription provides an important immediate safety net. The Language Line, as well as the components addressed below, will all be components of the in depth policy.

The department should reach out to Hispanic community groups, as well as the foreign language departments of both the city schools and the county college, for the purpose of developing language-training programs for department personnel. Some of these same resources could also provide similar training on communicating with the hearing impaired. These groups can also provide a starting point for development of a network of on call translators.

Finally, the department should also continue to evaluate quick reference manuals that are available both commercially, as well as those developed by other fire departments, and, in consultation with the groups previously mentioned, determine if it would be beneficial to issue these for use in the field. Issues such as whether to use something already available, and adapt it for use in Vineland, or, develop one in house would also need to be addressed.

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APPENDIX A

Communicating With Non-English Speaking Customers Survey

1. What is the population served by your department:

Under 25,000 _____
 25,000 – 99,999 _____
 100,000 – 249,999 _____
 250,000 – 499,999 _____
 Over 500,000 _____

2. Geographic Location of your department:

_____ Northeast	CT, ME, MA, NH, NJ, NY, PA, RI, VT
_____ Southeast	DC, DE, FL, GA, MD, NC, SC, VA
_____ North Central	IL, IN, IA, KS, MI, MN, MO, NE, ND, OH, SD, WI
_____ South Central	AL, AR, KY, LA, MS, OK, TN, TX, WV
_____ Northwest	AK, ID, MT, OR, WA, WY
_____ Southwest	AZ, CA, CO, HI, NM, NV, UT

3. Please estimate what percentage of the population served by your department speaks a language other than English as their primary language? _____

4. For the percentage of your population identified above, please list in order the three most prevalent non-English languages.

A) _____ B) _____ C) _____

5. For the prevalent languages listed in Question #4, does your department have personnel on duty at all times who speak these languages fluently?

Yes _____ No _____

6. Does your department have a formal policy or procedure in place to deal with emergency incidents involving non-English speaking customers?

Yes _____ No _____

If the answer to this question is yes, can you please describe your procedure or include a copy with your response? (Continue on a separate sheet if necessary)

>>OVER>>

7. If the answer to Question #6 is yes, does your department provide formal training to its members on communicating with non-English speaking customers?

Yes _____ No _____

If the answer to this question is yes, please describe your training program or include a copy of sample outlines with your response.

8. If your department does not have a policy on communicating with non-English speaking customers, how do you deal with these situations? (Check all that apply)

_____ Use of bilingual Firefighter(s)/EMT(s)
 _____ Use of bilingual Police Officer(s)
 _____ Use of other bilingual city employee(s)
 _____ Use of available bilingual bystander(s)
 _____ Whatever means available (Please describe)

9. Does your department have a quick reference manual, containing key phrases (i.e.: Where is the Fire?, Is everyone out?, etc.) in commonly encountered foreign languages, for use by field personnel?

Yes _____ No _____

If yes, may I obtain a copy?

10. If the answer to Question #9 is yes, how would you rate its effectiveness in field operations use?

_____ Very effective
 _____ Somewhat effective
 _____ Not effective
 _____ Not sure

11. If the answer to Question #9 is no, do you feel that some type of quick reference manual would be an effective resource for field operations use?

Yes _____ No _____

12. Does your department actively recruit and/or compensate bilingual personnel?

Yes _____ No _____

>>CONTINUE ON NEXT PAGE>>

13. If the answer to Question #12 is yes, do you: (Check all that apply)

- Recruit bilingual personnel?
 Give preferential hiring to bilingual personnel?
 Compensate bilingual personnel already on job?
 Utilize bilingual personnel already on the job without any type of compensation?

14. How do you determine who is “qualified” to be considered bilingual? (Check all that apply)

- Oral interview/examination/assessment center conducted in the language.
 Written examination instrument conducted to determine ability to write the language.
 Reading comprehension examination instrument to determine ability to read the language.
 Other evaluation/qualification instrument (Please describe).
 No formal testing/evaluation process utilized.

15. If your department has bilingual personnel available in key languages, do you:

- Give them priority assignment to stations serving areas with high concentrations of non-English speaking customers.
 Assign them normally, as you would any other firefighter.

Please note that your department will not be identified by name in the research. However, in order to prevent duplicate responses from the same department, I request that you include your department name on the survey form.

Department: _____

Contact Person: _____

Telephone or e-mail: _____

July 10, 2000

Dear Chief,

The Vineland Fire Department serves a community in which an increasing percentage of our citizens/customers speak a primary language other than English. Many of these customers speak little or no English, making communication difficult on emergency scenes. The department is currently evaluating whether to establish formal procedures for dealing with these situations, and if so, what the procedures should entail. I have been assigned this project and am completing it in conjunction with an applied research project for the National Fire Academy course, Strategic Management of Change. Enclosed, please find a survey titled, "*Communicating with non-English Speaking Customers*".

I would respectfully request that you, or someone that you designate, take a few minutes to complete this survey and return it to me as soon as possible. I have enclosed a self-stamped addressed envelope for your convenience. If you prefer you may fax your response to me at (856) 794-5073 or e-mail it to me at PEADARFIRE @ aol.com. The information that we obtain through this survey will be utilized to assist us with determining if some type of formal procedure, quick reference manual, etc. is required, or even feasible, to assist us with dealing with emergency incidents involving non-English speaking customers. Your response will be kept confidential and your department will not be identified by name or specific location.

Thank you in advance for your time and assistance. If you make a notation on the survey form, and include your name and mailing or e-mail address, I will be happy to provide you with a copy of the survey results once they are compiled.

Sincerely,

Peter J. Finley, Jr.
Captain

enclosure

APPENDIX B

Demographics of Fire Departments Answering Survey

Total number of surveys mailed to fire departments	243
Total number of surveys returned completed	97
Percentage of surveys completed	39.92%

Populations of Departments Surveyed	
under 25,000	4
25,000 - 99,999	41
100,000 - 249,000	32
250,000 - 499,999	7
over 500,000	13

Geographic Location of Departments Surveyed	
Northeast	15
Southeast	11
North central	31
South central	16
Northwest	17
Southwest	7

Minimum percentage of populations surveyed who speak a language other than English as their primary language	0%
Average percentage of populations surveyed who speak a language other than English as their primary language	35%
Maximum percentage of populations surveyed who speak a language other than English as their primary language	85%

Most Prevalent Non-English Languages Spoken In Populations of Departments Surveyed	
First	Spanish
Second	Vietnamese
Third	Russian